Superficial Heating Modalities

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Paraffin Wax Bath Therapy

Introduction :-

Paraffin wax bath therapy is an application of molten paraffin wax over the body parts.

The temperature of the paraffin wax is maintained at 40–44ºC, whereas its melting point is 51–55ºC.

The composition of solid wax: liquid paraffin: petroleum jelly is 7 : 3 : 1

Or solid wax : liquid paraffin or mineral oil is 7 : 1. The mode of transmission of heat from paraffin to the patient skin is by means of conduction.

Paraffin Wax Bath Unit

Parts of a typical Paraffin wax bath unit are stainless steel container, mains, thermostat, thermostat pilot lamp, power pilot lamp, lid and caster.

* Container contains wax and paraffin oil. Mains function is to switch on or off the heating element, which is located in the casing of paraffin wax bath unit.

* Thermostat keeps the temperature fixed or static in the range which is adjusted with knob.

* Thermostat pilot lamp indicates whether thermostat is on or off.

* Power pilot lamp function is to show whether power is on or off.

* Lid covers the container and caster allows the paraffin wax bath container to be moved from one place to another.

Techniques Of Application:-

Preparation Of Patient

The part to be treated must be cleaned with soap and water. Moisture is to be soaked with towel. Position of the patient should be such that the part to be treated comes closer to the wax bath container.

Before application one must ensure that there should be no moisture over the body tissues otherwise burn could occur. The warm wax is placed on body tissues by various techniques and the treatment is given for about 10–20 minutes.

Application Methods :-Various techniques used for the application of paraffin wax are as follows:

1. Direct Pouring Method: The molten wax is directly poured by a mug or utensil on the part to be treated and then wrapped around by a towel. The wax is allowed to solidify for about 10–12 minutes. Several (4–6) layers can be made over the body tissues.

2. Brushing Method: A brush of various sizes (4” or 6”) is used for the application of molten wax over the body tissues. Several coats (4–6) are applied over the body tissues and wax is allowed to solidify and wrapped over by a towel.

3. Direct Immersion or Dipping Method: In this method, the body part to be treated is directly immersed into the container of paraffin wax and taken out. Once the wax solidifies, the part is again immersed to make another layer of paraffin wax and wrapped around by a towel.

4. Toweling or Bandaging Method: A towel or a roll of bandage is immersed in molten paraffin wax and then wrapped around the body part. Several layers can be made over the body part. This method is preferably used for treating proximal parts of the body.Once the treatment is given by paraffin wax, it can be reused for the next session. Regular cleaning or changing of the wax is necessary to ensure good hygiene.

Physiological effects:-

* Paraffin wax bath therapy provides superficial heating to the tissues.

* It increases the local circulation to the area

* Increases the pliability of the skin

* Reduces stiffness

* Decrease pain

Indications:-Paraffin wax therapy is used for the treatment of:

i. Rheumatoid arthritis

ii. Osteoarthritis

iii. Joint stiffness, adhesions

iv. Post immobilization stiffness

v. Scars on the skin

Contraindications

Paraffin wax bath therapy should not be used in the cases of:

i. Open wounds

ii. Skin rashes

iii. Allergic conditions

iv. Impaired skin sensation

v. Defective arterial supply